AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method for high-resolution image recording of at least one object with a microscope, comprising the steps of:

positioning the at least one object in a receptacle arranged in an optical axis of the microscope,

generating at least two first data sets per object, wherein: (a) the at least two first data sets represent intermediate images of the at least one object with at least two different predetermined orientations relative to the optical axis of the microscope, (b)~~and~~ the at least two different predetermined orientations of the object are provided by controlled movement of the at least one object relative to the receptacle, and (c) the controlled movement comprises a rotation of the at least one object by an influence of electrical field forces, said object being rotated around at least one of a predetermined axis and a predetermined rotation angle, and

evaluating the data sets for obtaining quantitative three dimensional information.

2. (Currently Amended) The method according to claim 1, wherein said moving of the at least one object relative to the receptacle further comprises a translation ~~and/or rotation~~ of the at least one object by the~~an~~ influence of the electric field forces.

3. (Canceled).

4. (Previously Presented) The method according to claim 2, wherein said rotation comprises at least one rotation with a rotation axis parallel to the optical axis.

5. (Previously Presented) The method according to claim 2, wherein said rotation comprises at least one rotation with a rotation axis slanted relative to the optical axis.

6. (Previously Presented) The method according to claim 5, wherein said rotation axis is slanted within an angle range of up to 90 °.

7. (Previously Presented) The method according to claim 2, wherein said rotation comprises:

a rotation in a continuous mode or for predetermined time periods and angles, and/or

a rotation with changing rotational axes.

8. (Previously Presented) The method according to claim 2, wherein said rotation is conducted by holding the at least one object at a fixed position by said electric field forces and by rotating the at least one object by optical forces.

9. (Previously Presented) The method according to claim 1, further comprising steps of generating further intermediate images of the object, each with another focal plane, respectively, wherein each said focal plane is adjusted by scanning an objective of the microscope parallel to the optical axis.

10. (Previously Presented) The method according to claim 9, wherein said at least two different predetermined orientations of the object and said scanning an objective are conducted in an alternating mode.

11. (Previously Presented) The method according to claim 1, wherein said positioning comprises suspending said at least one object in a liquid in said receptacle.

12. (Previously Presented) The method according to claim 1, wherein said step of evaluating the data sets comprises at least one step selected from the group consisting of removing out-of-focus light and reconstructing a three dimensional map/image of the at least one object.

13. (Previously Presented) The method according to claim 1, wherein said at least one object comprises at least one eukaryotic cell, at least one prokaryotic cell and/or at least one artificial particle.

14. (Previously Presented) The method according to claim 1, wherein said microscope is used as a fluorescence microscope, a phase contrast microscope, a differential interference contrast microscope or a confocal microscope.

15. (Currently Amended) An imaging device for high-resolution image recording of at least one object, comprising:

a microscope imaging system with an optical axis,

a receptacle for accommodating said at least one object, said receptacle being arranged in said optical axis, and

a control circuit being arranged for: (a) generating at least two first data sets per object, wherein said at least two first data sets represent intermediate images of the at least one object with at least two different predetermined orientations relative to the optical axis, (b) providing controlled movement of the at least one object relative to the receptacle to generate the at least

two different predetermined orientations, wherein the controlled movement comprises a rotation of the at least one object by an influence of electrical field forces, said object being rotated around at least one of a predetermined axis and a predetermined rotation angle, and (cb) evaluating the data sets for obtaining an object image, and

a driving device adapted to controllably move the at least one object relative to the receptacle.

16. (Previously Presented) The imaging device according to claim 15, wherein said receptacle comprises a chamber of a fluidic microsystem and said driving device comprises microelectrodes arranged at walls of said chamber and connected with said control circuit.

17. (Previously Presented) The imaging device according to claim 16, wherein said driving device comprises at least three microelectrodes arranged in one plane in said chamber.

18. (Previously Presented) The imaging device according to claim 17, wherein said driving device comprises at least six microelectrodes arranged in two planes in said chamber.

19. (Previously Presented) The imaging device according to claim 15, wherein said control circuit comprises a switching box arranged for switching a rotation axis of the at least one object.

20. (Currently Amended) A method for high-resolution image recording of at least one object with a measuring device with a predetermined measurement field, comprising the steps of:

positioning the at least one object in a receptacle arranged in the measurement field of the measuring device,

generating at least two first data sets per object, wherein: (a) the at least two first data sets represent intermediate data of the at least one object with at least two different predetermined orientations relative to the measurement field of the measuring device, (b)and the at least two different predetermined orientations of the object are provided by controlled movement of the at least one object relative to the receptacle, and (c) the controlled movement comprises a rotation of the at least one object by an influence of electrical field forces, said object being rotated around at least one of a predetermined axis and a predetermined rotation angle, and

evaluating the data sets for obtaining quantitative three dimensional information.

21. (Previously Presented) The method according to claim 20, wherein said measuring device comprises a microscope and said measurement field is an optical axis of the microscope.

22. (Previously Presented) The method according to claim 20, wherein said measuring device comprises an impedance measurement device and said measurement field is the receptacle.